# Chapter 01 The Human Organism

## **Multiple Choice Questions**

- 1. What technique creates a three-dimensional dynamic image of blood vessels?
- A. digital subtraction angiography
- B. magnetic resonance imaging
- C. dynamic spatial reconstruction
- D. positron emission tomography

Bloom's Level: 4. Analyze

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Section: 01.01

Topic: Scope of anatomy and physiology

## **True / False Questions**

2. A CT scan allows for a three-dimensional image to be generated.

## **TRUE**

Bloom's Level: 1. Remember

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Section: 01.01

Topic: Body plan and organization

Type: Clinical

## **Multiple Choice Questions**

- 3. Magnetic resonance imaging is based on the movement of
- A. electrons in a magnetic field.
- B. carbons in a magnetic field.
- C. protons in a magnetic field.
- D. cells in a magnetic field.

Bloom's Level: 1. Remember

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Section: 01.01

Topic: Scope of anatomy and physiology

Type: Study Guide

- 4. The delivery of a radioactive compound to the body to study the metabolism of tissues is called
- A. MRI.
- **B.** PET.
- C. DSA.
- D. DSR.

Bloom's Level: 1. Remember

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Section: 01.01

Topic: Scope of anatomy and physiology

Type: Clinical

- 5. An anatomic image created from sound waves is a
- A. radiograph.
- B. CT scan.
- C. MRI.
- **<u>D.</u>** sonogram.

Bloom's Level: 1. Remember

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Section: 01.01

Topic: Survey of body systems Type: Clinical

Type: Clinical Type: Study Guide

- 6. A major limitation of radiographs is that they
- A. can only visualize bone.
- **B.** give only a flat, two-dimensional image of the body.
- C. are old technology that do not give good results.
- D. have very few applications.

Bloom's Level: 1. Remember

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Section: 01.01

Topic: Survey of body systems

Type: Clinical

- 7. The study of the body's organization by areas is
- A. systemic anatomy.
- **B.** regional anatomy.
- C. molecular biology.
- D. microbiology.
- E. surface anatomy.

Bloom's Level: 1. Remember

HAPS Objective: A05.01 Define the terms anatomy and physiology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Section: 01.01

Topic: Scope of anatomy and physiology

Type: Study Guide

- 8. The study of the external form of the body and its relationship to deeper structures is
- A. systemic anatomy.
- B. regional anatomy.
- C. molecular biology.
- D. microbiology.
- **E.** surface anatomy.

 ${\it Bloom's \ Level: 1. \ Remember}$ 

HAPS Objective: A05.01 Define the terms anatomy and physiology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Section: 01.01

Topic: Survey of body systems

- 9. The study of tissues is
- A. cytology.
- **B.** histology.
- C. molecular biology.
- D. microbiology.
- E. surface anatomy.

Bloom's Level: 1. Remember

HAPS Objective: A05.01 Define the terms anatomy and physiology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Section: 01.01

Topic: Survey of body systems

Type: Study Guide

- 10. Anatomy is
- A. the study of function.
- B. a branch of physiology.
- **C.** the study of structure.
- D. the study of living organisms.
- E. the study of homeostasis.

Bloom's Level: 1. Remember

HAPS Objective: A05.01 Define the terms anatomy and physiology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Section: 01.01

Topic: Survey of body systems

Type: Study Guide

- 11. The study of the structural features and functions of the cell is
- **<u>A.</u>** cytology.
- B. histology.
- C. molecular biology.
- D. microbiology.
- E. surface anatomy.

Bloom's Level: 1. Remember

HAPS Objective: A05.01 Define the terms anatomy and physiology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Section: 01.01

Topic: Survey of body systems

12. Which subdivision of anatomy involves the study of organs that function together?

A. regional

B. developmental

C. systemic

D. histology

E. surface anatomy

Bloom's Level: 1. Remember

HAPS Objective: A05.01 Define the terms anatomy and physiology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Section: 01.01

Topic: Survey of body systems

Type: Study Guide

13. Visual inspection of the appearance of the liver and gallbladder during surgery is associated with which of the following?

A. histology

B. physiology

C. gross anatomy

D. radiology

E. cytology

Bloom's Level: 2. Understand

HAPS Objective: A05.01 Define the terms anatomy and physiology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Learning Outcome: 01.01B. Define physiology

Section: 01.01

Topic: Survey of body systems

- 14. Microscopic examination of a frozen tissue specimen is an application of which of the following disciplines?
- **A.** histology
- B. physiology
- C. gross anatomy
- D. radiology
- E. regional anatomy

Bloom's Level: 3. Apply

HAPS Objective: A05.01 Define the terms anatomy and physiology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be studied.

Learning Outcome: 01.01B. Define physiology

Section: 01.01

Topic: Survey of body systems

- 15. An investigator who conducts an experiment to determine how changes in pH affect the function of enzymes on digestion is most likely to be a(n)
- A. neurologist.
- B. anatomist.
- C. engineer.
- **D.** physiologist.
- E. histologist.

Bloom's Level: 2. Understand

HAPS Objective: A05.01 Define the terms anatomy and physiology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.01C. Explain the importance of the relationship between structure and function.

Section: 01.01

Topic: Survey of body systems

## 16. An organelle is

**A.** a small structure within a cell.

B. a structure composed of several tissue types.

C. the basic structural unit of all living organisms.

D. a group of organs with a common set of functions.

E. a group of cells with similar structure and function.

Bloom's Level: 1. Remember

HAPS Objective: A06.01 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.02A. Name the six levels of organization of the body, and describe the major characteristics of each level.

Section: 01.02

Topic: Levels of organization

Type: Study Guide

## 17. An organ is

A. a small structure within a cell.

**B.** a structure composed of several tissue types.

C. the basic structural unit of all living organisms.

D. a group of molecules with a common set of functions.

E. a group of cells with similar structure and function.

Bloom's Level: 1. Remember

HAPS Objective: A06.01 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.02A. Name the six levels of organization of the body, and describe the major characteristics of each level.

Section: 01.02

Topic: Levels of organization

Type: Study Guide

#### 18. A cell is

A. a small structure within a molecule.

B. a structure composed of several tissue types.

C. the basic structural unit of living organisms.

D. a group of organs with a common set of functions.

E. a group of atoms with similar structure and function.

Bloom's Level: 1. Remember

HAPS Objective: A06.01 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.02A. Name the six levels of organization of the body, and describe the major characteristics of each level.

Section: 01.02

Topic: Levels of organization

#### 19. A tissue is a

A. structure contained within a cell.

B. lower level of organization than a cell.

C. group of organs that performs specific functions.

**D.** group of cells with similar structure and function.

E. structure that contains a group of organs.

Bloom's Level: 1. Remember

HAPS Objective: A06.01 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.02A. Name the six levels of organization of the body, and describe the major characteristics of each level.

Section: 01.02

Topic: Levels of organization

Type: Study Guide

#### 20. An organ system is

A. a small structure within a cell.

B. a structure composed of several tissue types.

C. the basic structural unit of all living organisms.

**D.** a group of organs with a common set of functions.

E. a group of cells with similar structure and function.

Bloom's Level: 1. Remember

HAPS Objective: A06.01 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.02A. Name the six levels of organization of the body, and describe the major characteristics of each level.

Section: 01.02

Topic: Levels of organization

## 21. Which of the following systems carries necessary compounds like oxygen and nutrients throughout the body?

A. nervous

B. cardiovascular

C. urinary

D. lymphatic

E. respiratory

Bloom's Level: 1. Remember

HAPS Objective: A07.01 List the organ systems of the human body and their major components.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and describe the major functions of each system.

Section: 01.02

Topic: Survey of body systems

Type: Study Guide

## 22. Which organ system is the location of blood cell production?

A. cardiovascular

**B.** skeletal

C. digestive

D. nervous

E. endocrine

Bloom's Level: 1. Remember

HAPS Objective: A07.01 List the organ systems of the human body and their major components.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and describe the major functions of each system.

Section: 01.02

Topic: Survey of body systems

## 23. Which body system would be affected by degeneration of cartilage in joints?

A. muscular

B. nervous

C. cardiovascular

**D.** skeletal

E. lymphatic

Bloom's Level: 1. Remember

HAPS Objective: A07.01 List the organ systems of the human body and their major components.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and describe the major functions of each system.

Section: 01.02

Topic: Survey of body systems

Type: Study Guide

## 24. The gallbladder, liver, and stomach are all part of the

A. endocrine system.

B. cardiovascular system.

C. skeletal system.

D. respiratory system.

**E.** digestive system.

Bloom's Level: 1. Remember

HAPS Objective: A07.01 List the organ systems of the human body and their major components.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and describe the major functions of each system.

Section: 01.02

Topic: Survey of body systems

Type: Study Guide

### 25. The integumentary system

**<u>A.</u>** regulates body temperature.

- B. breaks down food into small particles for absorption.
- C. controls intellectual functions.
- D. produces body movements.
- E. coordinates and integrates body function.

Bloom's Level: 1. Remember

HAPS Objective: A07.01 List the organ systems of the human body and their major components.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and describe the major functions of each system.

Section: 01.02

Topic: Survey of body systems

- 26. What system removes nitrogenous waste products from the blood and regulates blood pH, ion balance, and water balance?
- A. respiratory
- B. lymphatic
- C. cardiovascular
- D. immune
- E. urinary

Bloom's Level: 1. Remember

HAPS Objective: A07.01 List the organ systems of the human body and their major components.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and describe the major functions of each system.

Section: 01.02

Topic: Survey of body systems

Type: Study Guide

- 27. An organism's ability to use energy in order to swim is an example of
- A. metabolism.
- B. responsiveness.
- C. organization.
- D. maturation.
- E. development.

Bloom's Level: 2. Understand

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.03A. List and define six characteristics of life.

Section: 01.03

Topic: Levels of organization

- 28. The changes an organism undergoes through time is called
- A. organization.
- B. metabolism.
- C. reproduction.
- D. growth.
- **E.** development.

Bloom's Level: 1. Remember

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.03A. List and define six characteristics of life.

Section: 01.03

Topic: Levels of organization

- 29. Nerve cells generate electrical signals in response to changes in the environment. This is an example of
- A. respiration.
- B. digestion.
- C. movement.
- D. filtration.
- **E.** responsiveness.

Bloom's Level: 2. Understand

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.03A. List and define six characteristics of life.

Section: 01.03

Topic: Survey of body systems

- 30. An increase in the number of cells is
- A. reproduction.
- **B.** growth.
- C. differentiation.
- D. metabolism.
- E. organization.

Bloom's Level: 1. Remember

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.03A. List and define six characteristics of life.

Section: 01.03

Topic: Survey of body systems

- 31. Which of the following is most consistent with homeostasis?
- A. As blood pressure falls, blood flow to cardiac (heart) muscle decreases.
- B. As the mean blood pressure gradually increases in aging people, the blood vessel walls become thinner.
- C. Men working in a hot environment drink large quantities of water, and their urine volume increases.
- D. As body temperature decreases, blood vessels in the periphery dilate.
- **E.** Elevated blood glucose levels cause insulin secretion (insulin causes cells to take up glucose) to increase.

Bloom's Level: 3. Apply

HAPS Objective: B01.01 Define homeostasis.

HAPS Objective: B03.02 Provide an example of a negative feedback loop that utilizes the endocrine system to relay information. Describe

the specific cells or molecules (production cells, hormones, target cells) included in the feedback loop.

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.05A. Define homeostasis, and explain why it is important for proper body function.

Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example.

Section: 01.05 Topic: Homeostasis

- 32. Which of the following is consistent with homeostasis?
- **<u>A.</u>** As body temperature rises, sweating occurs to cool the body.
- B. When a person drinks large quantities of water, urine output decreases to raise blood volume.
- C. Elevated blood glucose levels cause insulin secretion to decline.
- D. Decreases in blood pressure cause a corresponding decrease in heart rate.
- E. As blood pressure falls, blood flow to the heart decreases.

Bloom's Level: 2. Understand

HAPS Objective: B01.01 Define homeostasis.

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.05A. Define homeostasis, and explain why it is important for proper body function.

Section: 01.05 Topic: Homeostasis

- 33. In a negative feedback mechanism, the response of the effector
- **A.** reverses the original stimulus.
- B. enhances the original stimulus.
- C. has no effect on the original stimulus.
- D. is usually damaging to the body.
- E. creates a cycle that leads away from homeostasis.

Bloom's Level: 1. Remember

HAPS Objective: B02.01 List the components of a feedback loop and explain the function of each.

HAPS Objective: B02.02 Compare and contrast positive and negative feedback in terms of the relationship between stimulus and response.

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example.

Section: 01.05

Topic: Examples of homeostatic mechanisms

Topic: Homeostasis Topic: Types of homeostasis

Topic: Types of homeostatic mechanisms

Type: Study Guide

- 34. A researcher discovered a sensory receptor that detects decreasing oxygen concentrations in the blood. According to the principles of negative feedback, it is likely that stimulation of this sensory receptor will produce which of the following types of responses?
- A. a decrease in heart rate
- **B.** an increase in the respiratory rate
- C. an increase in physical activity
- D. unconsciousness
- E. both a decrease in heart rate and an increase in the respiratory rate

Bloom's Level: 4. Analyze

HAPS Objective: B03.01 Provide an example of a negative feedback loop that utilizes the nervous system to relay information. Describe the specific organs, structures, cells or molecules (receptors, neurons, CNS structures, effectors, neurotransmitters) included in the feedback loop.

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example.

Section: 01.05

Topic: Examples of homeostatic mechanisms

Topic: Homeostasis
Topic: Types of homeostasis

Topic: Types of homeostatic mechanisms

## 35. Which of the following is NOT a component of a negative feedback mechanism?

A. effector

## **B.** stabilizer

C. control center

D. receptor

Bloom's Level: 2. Understand

HAPS Objective: B02.01 List the components of a feedback loop and explain the function of each.

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example.

Section: 01.05

Topic: Examples of homeostatic mechanisms

Topic: Homeostasis

Topic: Types of homeostasis

Topic: Types of homeostatic mechanisms

## **True / False Questions**

## 36. Positive-feedback mechanisms are always damaging to the body. **FALSE**

Bloom's Level: 1. Remember

HAPS Objective: B02.02 Compare and contrast positive and negative feedback in terms of the relationship between stimulus and response.

HAPS Objective: B04.01 Provide specific examples to demonstrate how organ systems respond to maintain homeostasis.

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.05C. Describe a positive-feedback mechanism and give an example.

Section: 01.05

Topic: Examples of homeostatic mechanisms

Topic: Homeostasis Topic: Types of homeostasis

Topic: Types of homeostatic mechanisms

## **Multiple Choice Questions**

| 37. The anatomical term that means "away from the midline of the body" is A. medial. B. proximal. C. distal. D. lateral. E. superficial.  |
|---|
| Bloom's Level: 1. Remember HAPS Objective: A04.01 List and define the major directional terms used in anatomy. HAPS Topic: Module A Body Plan and Organization Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures Section: 01.06 Topic: Directional terms Type: Study Guide |
| 38. The thumb is to the fifth digit (little finger).  A. distal  B. lateral C. medial D. proximal E. superficial  |

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional and systemic terminology. HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures. Section: 01.06

| 39. Which of the following describes the position of the nose?  A. inferior to the chin  B. superior to the forehead  C. posterior to the ears  D. lateral to the eyes  E. superior to the mouth   |
|--|
| Bloom's Level: 1. Remember  HAPS Objective: A04.01 List and define the major directional terms used in anatomy.  HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional and systemic terminology.  HAPS Topic: Module A Body Plan and Organization  Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.  Section: 01.06  Topic: Directional terms  Type: Study Guide |
| 40. The shoulder is to the elbow. A. lateral B. dorsal C. distal D. ventral E. proximal  |

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional and systemic terminology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Section: 01.06 Topic: Directional terms Type: Study Guide

#### 41. A term that means "toward the attached end of a limb" is

A. medial.

B. lateral.

C. superficial.

D. distal.

**E.** proximal.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Section: 01.06

Topic: Directional terms Type: Study Guide

## 42. Which of the following is most inferior in location?

A. pelvic cavity

B. mediastinum

C. diaphragm

D. pleural cavity

E. pericardial cavity

Bloom's Level: 2. Understand

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional and systemic terminology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

Topic: Body cavities and regions

- 43. While Stacy is in the process of passing over the bar during a pole vault, her hips are considered to be
- A. anterior to her shoulders.
- B. posterior to her shoulders.
- **C.** inferior to her shoulders.
- D. superior to her shoulders.
- E. cephalic to her shoulders.

Bloom's Level: 2. Understand

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional and systemic terminology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Section: 01.06

Topic: Directional terms Type: Study Guide

## 44. Cephalic means

- A. toward the middle or midline of the body.
- B. away from the surface.
- **C.** closer to the head.
- D. closer than another structure to the point of attachment to the trunk.
- E. toward the back of the body.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional and systemic terminology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Section: 01.06

#### 45. Posterior means

- A. toward the middle or midline of the body.
- B. away from the surface.
- C. closer to the head.
- D. closer than another structure to the point of attachment to the trunk.
- **E.** toward the back of the body.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional and systemic terminology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Section: 01.06 Topic: Directional terms Type: Study Guide

#### 46. Medial means

**<u>A.</u>** toward the middle or midline of the body.

- B. away from the surface.
- C. closer to the head.
- D. closer than another structure to the point of attachment to the trunk.
- E. toward the back of the body.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Topic: Directional terms Type: Study Guide

#### 47. Proximal means

- A. toward the middle or midline of the body.
- B. away from the surface.
- C. closer to the head.
- **D.** closer than another structure to the point of attachment to the trunk.
- E. toward the back of the body.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Section: 01.06

#### 48. Deep means

A. toward the middle or midline of the body.

**B.** away from the surface.

C. closer to the head.

D. closer than another structure to the point of attachment to the trunk.

E. toward the back of the body.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Section: 01.06

Topic: Directional terms Type: Study Guide

## 49. In the expression "Let your fingers do the walking," which of the following anatomical terms could be substituted for "fingers?"

A. tarsals

B. manuals

C. digits

D. carpals

E. metatarsals

Bloom's Level: 2. Understand

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

## 50. The anatomical arm refers to the part of the upper limb from the

A. shoulder to the wrist.

B. elbow to the wrist.

**C.** shoulder to the elbow.

D. elbow to the fingers.

E. shoulder to the fingers.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

## 51. The lumbar region is the

- A. area in front of the elbow.
- B. chest area.
- C. lower back.
- D. bottom of foot.
- E. forearm.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

Type: Study Guide

## 52. The antecubital region is the

**A.** area in front of the elbow.

- B. chest area.
- C. lower back.
- D. bottom of foot.
- E. forearm.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

Type: Study Guide

## 53. The antebrachial region is the

- A. area in front of the elbow.
- B. chest area.
- C. lower back.
- D. bottom of foot.
- **E.** forearm.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

### 54. The pectoral region is the

A. area in front of the elbow.

**B.** chest area.

C. lower back.

D. bottom of foot.

E. forearm.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

Type: Study Guide

## 55. The plantar surface is the

A. area in front of the elbow.

B. chest area.

C. lower back.

**D.** bottom of foot.

E. forearm.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

Type: Study Guide

## 56. The brachial region is commonly known as the

A. groin.

B. buttock.

C. breastbone.

**D.** upper arm.

E. naval.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

## 57. The inguinal region is commonly known as the

A. groin.

B. buttock.

C. breastbone.

D. upper arm.

E. naval.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

Type: Study Guide

## 58. The gluteal region is commonly known as the

A. groin.

B. buttock.

C. breastbone.

D. upper arm.

E. naval.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

Type: Study Guide

## 59. The sternal region is commonly known as the

A. groin.

B. buttock.

**C.** breastbone.

D. upper arm.

E. naval.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

## 60. The umbilical region is commonly known as the

A. groin.

B. buttock.

C. breastbone.

D. upper arm.

E. naval.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

Type: Study Guide

## 61. The cervical region is the

A. calf.

B. armpit.

C. hollow behind the knee.

**D.** neck.

E. thigh.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

Type: Study Guide

## 62. The popliteal region is the

A. calf.

B. armpit.

**C.** hollow behind the knee.

D. neck.

E. thigh.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

| 63. The sural region is the  A. calf. B. armpit. C. hollow behind the knee. D. neck. E. thigh.   |
|--|
| Bloom's Level: 1. Remember HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body. HAPS Topic: Module A Body Plan and Organization Learning Outcome: 01.06C. Know the terms for the parts and regions of the body. Section: 01.06 Topic: Body plan and organization Type: Study Guide       |
| 64. The femoral region is the A. calf. B. armpit. C. hollow behind the knee. D. neck. E. thigh.  |
| Bloom's Level: 1. Remember  HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.  HAPS Topic: Module A Body Plan and Organization  Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.  Section: 01.06  Topic: Body plan and organization  Type: Study Guide |
| 65. The axillary region is the A. calf.  B. armpit. C. hollow behind the knee. D. neck. E. thigh.  |

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the body.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body plan and organization

| 66. A vertical plane that separates the body into right and left portions is called a plane.  |
|---|
| A. sagittal B. transverse   |
| C. frontal  |
| D. horizontal   |
| E. coronal  |
|   |
| Bloom's Level: 1. Remember HAPS Objective: A02.01 Identify the various planes in which a body might be dissected. HAPS Topic: Module A Body Plan and Organization Learning Outcome: 01.06D. Name and describe the three major planes of the body. |
| Section: 01.06 Topic: Body planes and sections  |
| Type: Study Guide   |
|   |
| 67. "Cutting off your nose" would be a section in the plane.  A. coronal  |
| B. nasal  |
| C. median D. transverse   |
| E. sagittal   |
|   |
| Bloom's Level: 2. Understand  |
| HAPS Objective: A02.01 Identify the various planes in which a body might be dissected.  HAPS Topic: Module A Body Plan and Organization   |
| Learning Outcome: 01.06D. Name and describe the three major planes of the body. Section: 01.06  |
| Topic: Body planes and sections   |
|   |
| 68. The cavity of the body immediately inferior to the diaphragm is the cavity.  A. pleural   |
| B. thoracic   |
| C. inguinal   |
| D. pelvic  E. abdominal   |
| <del>_</del>  |
|   |
| Bloom's Level: 1. Remember  HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.   |
| HAPS Topic: Module A Body Plan and Organization Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.  |
| Section: 01.06 Topic: Body cavities and regions   |

- 69. The suffix "-itis" means inflammation. Which of the following terms means inflammation of the membrane lining the body cavity that contains the liver?
- A. pericarditis
- **B.** peritonitis
- C. pleurisy
- D. colitis
- E. hepatitis

Bloom's Level: 2. Understand

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

Topic: Body cavities and regions

- 70. The wall of the abdominopelvic cavity is lined by a serous membrane called the
- A. visceral pleural membrane.
- **B.** parietal peritoneum.
- C. visceral mediastinal membrane.
- D. visceral peritoneum.
- E. epicardium.

Bloom's Level: 1. Remember

HAPS Objective: A03.03 Describe the location of the four abdominopelvic quadrants and the nine abdominopelvic regions and list the major organs located in each.

HAPS Objective: A04.02 Describe the location of body structures, using appropriate directional terminology.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06G. Locate organs in their specific cavity, abdominal quadrant, or region. Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

Topic: Body cavities and regions

### 71. The visceral pleura is

A. a double-layered serous membrane that anchors some of the abdominal organs to the body wall.

**B.** the serous membrane that covers the lungs.

C. the serous membrane that lines the abdominal and pelvic cavities.

D. space located between the visceral and parietal pleura.

E. the membrane that lines the pericardial sac.

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

Topic: Body cavities and regions

Type: Study Guide

## 72. The parietal peritoneum is

A. a double-layered serous membrane that anchors some of the abdominal organs to the body wall.

B. the serous membrane that covers the lungs.

C. the serous membrane that lines the abdominal and pelvic cavities.

D. space located between the visceral and parietal pleura.

E. the membrane that lines the pericardial sac.

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

Topic: Body cavities and regions

## 73. The mesentery is

**<u>A.</u>** a double-layered serous membrane that anchors some of the abdominal organs to the body wall.

- B. the serous membrane that covers the lungs.
- C. the serous membrane that lines the abdominal and pelvic cavities.
- D. space located between the visceral and parietal pleura.
- E. the membrane that lines the pericardial sac.

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

Topic: Body cavities and regions

Type: Study Guide

## 74. The pleural cavity is the

A. a double-layered serous membrane that anchors some of the abdominal organs to the body wall.

- B. the serous membrane that covers the lungs.
- C. the serous membrane that lines the abdominal and pelvic cavities.
- **D.** space located between the visceral and parietal pleura.
- E. the membrane that lines the pericardial sac.

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

Topic: Body cavities and regions

## 75. The parietal pericardium is

A. a double-layered serous membrane that anchors some of the abdominal organs to the body wall.

B. the serous membrane that covers the lungs.

C. the serous membrane that lines the abdominal and pelvic cavities.

D. space located between the visceral and parietal pleura.

**E.** the membrane that lines the pericardial sac.

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous

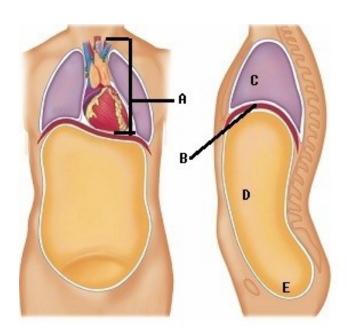
HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

Topic: Body cavities and regions

Type: Study Guide



Bloom's Level: 1. Remember

HAPS Topic: Module A Body Plan and Organization

Section: 01.06

## 76. Here is a figure showing major trunk cavities and other structures. What does "A" represent?

A. diaphragm

B. mediastinum

C. pelvic cavity

D. thoracic cavity

E. abdominal cavity

Bloom's Level: 1. Remember

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

Topic: Body cavities and regions

77. Here is a figure showing major trunk cavities and other structures. What does "B" represent?

A. diaphragm

B. mediastinum

C. pelvic cavity

D. thoracic cavity

E. abdominal cavity

Bloom's Level: 1. Remember

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

## 78. Here is a figure showing major trunk cavities and other structures. What does "C" represent?

A. diaphragm

B. mediastinum

C. pelvic cavity

**D.** thoracic cavity

E. abdominal cavity

Bloom's Level: 1. Remember

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

Topic: Body cavities and regions

## 79. Here is a figure showing major trunk cavities and other structures. What does "D" represent?

A. diaphragm

B. mediastinum

C. pelvic cavity

D. thoracic cavity

**E.** abdominal cavity

Bloom's Level: 1. Remember

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

80. Here is a figure showing major trunk cavities and other structures. What does "E" represent?

A. diaphragm

B. mediastinum

C. pelvic cavity

D. thoracic cavity

E. abdominal cavity

Bloom's Level: 1. Remember

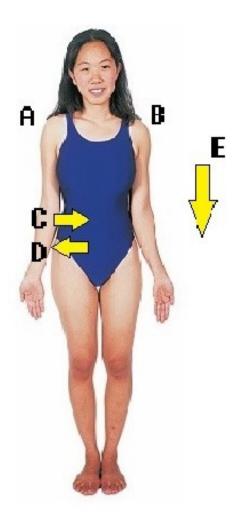
HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

Chapter 01 - The Human Organism



Bloom's Level: 1. Remember

HAPS Objective: A01.02 Describe how to use the terms right and left in anatomical reference. HAPS Objective: A04.01 List and define the major directional terms used in anatomy. HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures. Section: 01.06

Topic: Directional terms

| 81. Directional terms are important in the study of anatomy. What does "A" represent?  A. median  B. right C. left D. inferior E. lateral   |
|---|
| Bloom's Level: 1. Remember HAPS Objective: A01.02 Describe how to use the terms right and left in anatomical reference. HAPS Objective: A04.01 List and define the major directional terms used in anatomy. HAPS Topic: Module A Body Plan and Organization Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures. Section: 01.06 Topic: Directional terms |
| 82. Directional terms are important in the study of anatomy. What does "B" represent?  A. median B. right C. left D. inferior E. lateral  |
| Bloom's Level: 1. Remember HAPS Objective: A01.02 Describe how to use the terms right and left in anatomical reference. HAPS Objective: A04.01 List and define the major directional terms used in anatomy. HAPS Topic: Module A Body Plan and Organization Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures. Section: 01.06 Topic: Directional terms |
| 83. Directional terms are important in the study of anatomy. What does "C" represent?  A. median B. right C. left D. inferior E. lateral  |
| Bloom's Level: 1. Remember  |

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Topic: Module A Body Plan and Organization
Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Section: 01.06

Topic: Directional terms

# 84. Directional terms are important in the study of anatomy. What does "D" represent?

A. median

B. right

C. left

D. inferior

E. lateral

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Section: 01.06

Topic: Directional terms

# 85. Directional terms are important in the study of anatomy. What does "E" represent?

A. median

B. right

C. left

D. inferior

E. lateral

 ${\it Bloom's \ Level: 1. \ Remember}$ 

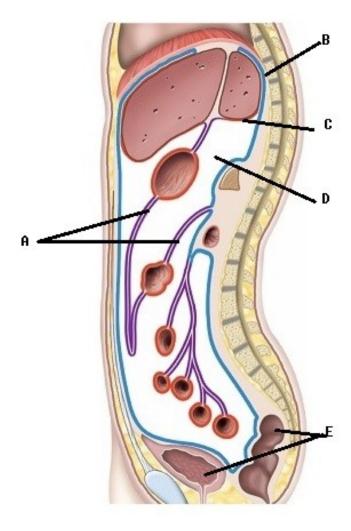
HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Section: 01.06

Topic: Directional terms



Bloom's Level: 1. Remember HAPS Topic: Module A Body Plan and Organization Section: 01.06 Topic: Body cavities and regions

- 86. This is a sagittal section through the abdominopelvic cavity. What structure does "A" represent?
- A. visceral peritoneum (covers organs)
- **B.** mesentery
- C. parietal peritoneum (lines cavity)
- D. retroperitoneal organs
- E. peritoneal cavity

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

Topic: Body cavities and regions

- 87. This is a sagittal section through the abdominopelvic cavity. What serous membrane does "B" represent?
- A. visceral peritoneum (covers organs)
- B. mesentery
- C. parietal peritoneum (lines cavity)
- D. retroperitoneal organs
- E. peritoneal cavity

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

Topic: Body cavities and regions

88. This is a sagittal section through the abdominopelvic cavity. What serous membrane does "C" represent?

A. visceral peritoneum (covers organs)

B. mesentery

C. parietal peritoneum (lines cavity)

D. retroperitoneal organs

E. peritoneal cavity

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

Topic: Body cavities and regions

89. This is a sagittal section through the abdominopelvic cavity. What cavity does "D" represent?

A. visceral peritoneum (covers organs)

B. mesentery

C. parietal peritoneum (lines cavity)

D. retroperitoneal organs

**E.** peritoneal cavity

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

Topic: Body cavities and regions

90. This is a sagittal section through the abdominopelvic cavity. What structures does "E" represent?

A. visceral peritoneum (covers organs)

B. mesentery

C. parietal peritoneum (lines cavity)

**D.** retroperitoneal organs

E. peritoneal cavity

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

Topic: Body cavities and regions

- 91. What branch of physiology would study the effects of sunbathing on the skin?
- A. cell physiology
- B. systemic physiology
- C. regional physiology
- **D.** organ physiology

Bloom's Level: 3. Apply

HAPS Objective: A05.02 Give specific examples to show the interrelationship between anatomy and physiology.

HAPS Topic: Module A Body Plan and Organization

Section: 01.01

Topic: Scope of anatomy and physiology

Type: LearnSmart

# **True / False Questions**

92. The part of the feedback mechanism that processes information, relates it to other information, and makes a decision of action is the receptor.

## **FALSE**

Bloom's Level: 2. Understand

HAPS Objective: B02.01 List the components of a feedback loop and explain the function of each.

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.05A. Define homeostasis, and explain why it is important for proper body function.

Section: 01.05 Topic: Homeostasis Type: LearnSmart

# **Multiple Choice Questions**

93.

Which of the following is *not* a function of the control center within a feedback mechanism?

A.

receives and processes information

В.

controls effectors

C.

establishes a set point

# <u>D.</u>

detects a change in the value of a variable

Bloom's Level: 3. Apply HAPS Objective: B01.01 Define homeostasis.

HAPS Objective: B02.01 List the components of a feedback loop and explain the function of each.

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.05A. Define homeostasis, and explain why it is important for proper body function.

Section: 01.05 Topic: Homeostasis Type: LearnSmart

| $\sim$ | 4 |
|--------|---|
| ЧZ     | 1 |

In reference to the body tempaerature in living organisms, the set point can be defined as the

# <u>A.</u>

ideal normal value

В.

current specific value

C.

amount of change that must occur for a condition to return to ideal normal value

Bloom's Level: 3. Apply HAPS Objective: B02.01 List the components of a feedback loop and explain the function of each.

HAPS Topic: Module B Homeostasis
Learning Outcome: 01.05A. Define homeostasis, and explain why it is important for proper body function.

Section: 01.05 Topic: Homeostasis Type: LearnSmart

95.

Which of the following is *not* a characteristic of homeostatic variables?

A.

their values can change

В.

they must remain within a narrow change

# <u>C.</u>

they always remain at a fixed value

Bloom's Level: 3. Apply

HAPS Objective: B02.01 List the components of a feedback loop and explain the function of each.

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.05A. Define homeostasis, and explain why it is important for proper body function.

Section: 01.05

Topic: Definition of Homeostasis

Type: LearnSmart

# **True / False Questions**

96. The control center compares input from a receptor with the ideal normal value for a condition called a set point.

### **TRUE**

Bloom's Level: 2. Understand

HAPS Objective: B01.01 Define homeostasis.

HAPS Objective: B02.01 List the components of a feedback loop and explain the function of each.

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.05A. Define homeostasis, and explain why it is important for proper body function.

Section: 01.05 Topic: Homeostasis Type: LearnSmart

# **Multiple Choice Questions**

| 97.  |
|--|
| Imagine the following scernerio:   |
| Blood pressure decreases below normal levels. $\rightarrow$ Blood flow to the heart decreases $\rightarrow$ Heart is unable to pump as much blood. $\rightarrow$ Blood pressure decreases even more. |
| This is an example of feedback.  |
| A. positive  |
| B.   |
| negative   |
|  |
|  |

Bloom's Level: 4. Analyze
HAPS Objective: B02.02 Compare and contrast positive and negative feedback in terms of the relationship between stimulus and response.

HAPS Topic: Module B Homeostasis Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example. Learning Outcome: 01.05C. Describe a positive-feedback mechanism and give an example. Section: 01.05

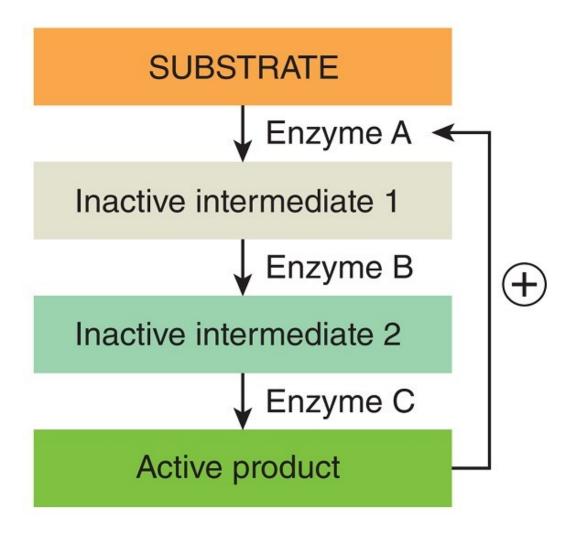
Topic: Examples of homeostatic mechanisms Topic: Homeostasis

Topic: Types of homeostasis Topic: Types of homeostatic mechanisms

Type: LearnSmart

98.

This figure illustrates changes in blood pressure when \_\_\_\_\_ feedback mechanisms are in control.



<u>A.</u>

positive

| В.  |
|---|
| negative  |
|   |
| Bloom's Level: 2. Understand Figure: 1.08 HAPS Objective: B02.02 Compare and contrast positive and negative feedback in terms of the relationship between stimulus and response. Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example. Learning Outcome: 01.05C. Describe a positive-feedback mechanism and give an example. Section: 01.05 Topic: Examples of homeostatic mechanisms Topic: Homeostasis Topic: Types of homeostasis Topic: Types of homeostatic mechanisms Type: LearnSmart                                      |
| 99.   |
| Imagine the following scenario:   |
| Platelets adhere to a damaged blood vessel $\rightarrow$ Platelets secrete various substances $\rightarrow$ Platelets adhere to a damaged blood vessel  |
| This is an example of feedback.   |
|   |
|   |
| <u>A.</u>   |
| positive  |
| В.  |
| negative  |
|   |
| Bloom's Level: 3. Apply HAPS Objective: B02.02 Compare and contrast positive and negative feedback in terms of the relationship between stimulus and response. HAPS Topic: Module B Homeostasis Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example. Learning Outcome: 01.05C. Describe a positive-feedback mechanism and give an example. Section: 01.05 Topic: Examples of homeostatic mechanisms Topic: Homeostasis Topic: Types of homeostasis Topic: Types of homeostatic mechanisms Topic: Types of homeostatic mechanisms |

| 100.  |           |
|---|-----------|
| Positive feedback mechanisms are more commonly seen in indi | ividuals. |
| A.  |           |
| healthy   |           |
| <u>B.</u>   |           |

Bloom's Level: 3. Apply

HAPS Objective: B03.03 Provide an example of a positive feedback loop in the body. Describe the specific structures (organs, cells or

molecules) included in the feedback loop. HAPS Topic: Module B Homeostasis

Learning Outcome: 01.05C. Describe a positive-feedback mechanism and give an example.

Section: 01.05

unhealthy

Topic: Examples of homeostatic mechanisms

Topic: Homeostasis Topic: Types of homeostasis

Topic: Types of homeostatic mechanisms

Type: LearnSmart

# **True / False Questions**

101.

True or false: Positive feedback mechanisms are less common in healthy individuals than negative feedback mechanisms.

# **TRUE**

Bloom's Level: 3. Apply

HAPS Objective: B03.03 Provide an example of a positive feedback loop in the body. Describe the specific structures (organs, cells or

molecules) included in the feedback loop. HAPS Topic: Module B Homeostasis

Learning Outcome: 01.05C. Describe a positive-feedback mechanism and give an example.

Section: 01.05

Topic: Examples of homeostatic mechanisms

Topic: Homeostasis Topic: Types of homeostasis

Topic: Types of homeostatic mechanisms

Type: LearnSmart

# **Multiple Choice Questions**

| 102.  |
|---|
| A person lying with his/her face down is said to be in what position? |
| A.  |
|   |
| supine  |
| <u>B.</u>   |
| prone   |
| C.  |
| anatomical  |
| D.  |
| reverse   |
|   |
|   |

Bloom's Level: 1. Remember HAPS Objective: A01.01 Describe a person in anatomical position. HAPS Topic: Module A Body Plan and Organization Learning Outcome: 01.06A. Describe a person in anatomical position.

Section: 01.06 Topic: Anatomical position Type: LearnSmart Type: Study Guide

| 103.   |
|--|
| Which of the following is <i>not</i> a term that describes a cut that separates the body into left and right portions? |
| A.   |
| sagittal   |
| В.   |
| median   |
| C.   |
| parasagittal   |
| <u>D.</u>  |
| coronal  |

Bloom's Level: 2. Understand
HAPS Objective: A02.01 Identify the various planes in which a body might be dissected.
HAPS Topic: Module A Body Plan and Organization
Section: 01.06
Topic: Body planes and sections
Type: LearnSmart
Type: Study Guide

### 104.

The plane that cuts the body lengthwise and separates the body into anterior and posterior portions is called

A.

transverse

# **B.**

frontal

C.

sagittal

Bloom's Level: 3. Apply

HAPS Objective: A02.01 Identify the various planes in which a body might be dissected.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06D. Name and describe the three major planes of the body.

Section: 01.06

Topic: Body planes and sections

Type: LearnSmart Type: Study Guide

# **True / False Questions**

105. Whereas a 'plane' describes an imaginary flat surface, a 'section' describes a way to cut an organ.

# **TRUE**

Bloom's Level: 3. Apply

HAPS Objective: A02.01 Identify the various planes in which a body might be dissected.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06D. Name and describe the three major planes of the body. Learning Outcome: 01.06E. Name and describe the three major ways to cut an organ.

Section: 01.06

Topic: Body planes and sections

Type: LearnSmart Type: Study Guide

# **Multiple Choice Questions**

106.

A cut through the long axis of an organ is a(n)

# <u>A.</u>

longitudinal section

В.

oblique section

C.

transverse section

Bloom's Level: 1. Remember

HAPS Objective: A02.01 Identify the various planes in which a body might be dissected.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06E. Name and describe the three major ways to cut an organ.

Section: 01.06

Topic: Body planes and sections

Type: LearnSmart
Type: Study Guide

# **True / False Questions**

107.

The thoracic cavity is divided into right and left parts by a median partition called the sternum.

# **FALSE**

Bloom's Level: 2. Understand

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

Topic: Body cavities and regions

Type: LearnSmart

### 108.

True or False? Both the spleen and the urinary bladder are contained within the pelvic cavity subdivision of the abdominopelvic cavity.

# **FALSE**

Bloom's Level: 3. Apply

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06G. Locate organs in their specific cavity, abdominal quadrant, or region.

Section: 01.06

Topic: Body cavities and regions

Type: LearnSmart

# 109.

True or False? The kidneys are contained within the pelvic cavity subdivision of the abdominopelvic cavity.

# **FALSE**

Bloom's Level: 3. Apply

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Topic: Module A Body Plan and Organization

Learning Outcome: 01.06G. Locate organs in their specific cavity, abdominal quadrant, or region.

Section: 01.06

Topic: Body cavities and regions

Type: LearnSmart

# **Multiple Choice Questions**

| 110.   |
|--|
| An example of a structure contained by the mediastinum is the:   |
| A.   |
| brain  |
| В.   |
| stomach  |
| <u>C.</u>  |
| esophagus  |
| D.   |
| sternum  |
| E.   |
| lung   |
|  |
| Bloom's Level: 2. Understand HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity. HAPS Topic: Module A Body Plan and Organization Learning Outcome: 01.06G. Locate organs in their specific cavity, abdominal quadrant, or region. Section: 01.06 Topic: Body cavities and regions Type: LearnSmart Type: Study Guide |

# **True / False Questions**

### 111.

Scientists believe that any significant change in the composition of the microbiome of the human integumentary system may increase a person's susceptibility to autoimmune diseases.

## **FALSE**

Early research seems to indicate that any significant change in the profile of the microbiome of the human **gut** may increase a person's susceptibility to autoimmune diseases. (not the **integumentary** system)

Bloom's Level: 1. Remember HAPS Topic: Module B Homeostasis Learning Outcome: Microbes in Your Body

Type: Clinical

### 112.

It has been suggested by some scientists that early exposure to antibiotics significantly change in the makeup of the microbes in the human intestines may increase a person's susceptibility to autoimmune diseases like Crohn's disease and asthma.

### **TRUE**

Bloom's Level: 1. Remember HAPS Topic: Module B Homeostasis Learning Outcome: Microbes in Your Body

Type: Clinical

# **Multiple Choice Questions**

# 113.

There are more microbial cells than human cells in your body and the health of this microbiota clearly influences human well-being. How many microbes are there?.

### A.

For every cell in your body, there are one hundred microbial cells.

# В.

For every cell in your body, there are one thousand microbial cells.

# <u>C.</u>

For every cell in your body, there are ten microbial cells.

#### D.

For every cell in your body, there are ten thousand microbial cells.

Bloom's Level: 1. Remember HAPS Topic: Module B Homeostasis Learning Outcome: Microbes in Your Body

Type: Clinical

### 114.

A molecular biologist discovers that if a specific drug effectively treats obesity in mice, what can researchers conclude?

A.

If the drug was effective in a large number of mice, it will therefore be effective in humans.

В.

If the drug was effective in a small proportion of mice, it will be effective in a small proportion of humans.

C.

The mice have provided a positive control in this experiment that proves the drug is effective in humans.

# <u>D.</u>

The drug is effective in the mouse model; it must still be tested in humans.

E.

The effect of the drug on mice has no bearing on the effect of the drug on humans.

Bloom's Level: 4. Analyze

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.04A. Explain why it is important to study other organisms along with humans.

Section: 01.04

Topic: Levels of organization

### 115.

With regard to the validity of biomedical research in physiological studies, which statement is correct?

# <u>A.</u>

Although the general homeostatic mechanisms may be the same in some animal species, the individual variables are often very different.

В.

Although the individual variables may be the same in some animal species, the general homeostatic mechanisms are often very different.

Bloom's Level: 4. Analyze

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.04A. Explain why it is important to study other organisms along with humans.

Section: 01.04

Topic: Levels of organization

# **True / False Questions**

## 116.

True or False? Many undergraduate anatomy programs study cats and rats in laboratory settings. Use of these animal is ideal because they are inexpensive and although they are physically smaller, the internal structures are identical to humans.

### **FALSE**

Bloom's Level: 3. Apply

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.04A. Explain why it is important to study other organisms along with humans.

Section: 01.04

Topic: Levels of organization

#### 117.

True or False? With regard to biomedical research: Because rats, pigs, apes, and other mammals share over 90% of the same genes as humans, these animals are always good predictors for how humans will respond to a specific drug therapy.

# **FALSE**

Bloom's Level: 3. Apply

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.04A. Explain why it is important to study other organisms along with humans.

Section: 01.04

Topic: Levels of organization

### 118.

True or False? With regard to biomedical research: It has been found that drugs that are toxic to one mammal species will be toxic to another mammal species.

# **FALSE**

Bloom's Level: 3. Apply

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.04A. Explain why it is important to study other organisms along with humans.

Section: 01.04

Topic: Levels of organization

### 119.

True or False? With regard to biomedical research: Rats and humans share over 90% of the same genes.

# **TRUE**

Bloom's Level: 3. Apply

HAPS Topic: Module B Homeostasis

Learning Outcome: 01.04A. Explain why it is important to study other organisms along with humans.

Section: 01.04

Topic: Levels of organization

# **Multiple Choice Questions**

# 120. Which of the following statements is TRUE?

- A. The coordinated activity of the organ systems is necessary for normal function.
- B. Because organ systems are so interrelated, dysfunction in one organ system can have profound effects on other systems.
- C. An organism is any living thing considered as a whole whether composed of one cell such as a bacteria or trillions of cells such as a human.
- D. Living things are highly organized and disruption of this organized state can lead to loss of function and death.

# E. All of these statements are true

Bloom's Level: 4. Analyze

HAPS Objective: A05.01 Define the terms anatomy and physiology.

Learning Outcome: 01.01C. Explain the importance of the relationship between structure and function.

Section: 01.01

Topic: Scope of anatomy and physiology